

of the book is that containing an account of his two visits to the Rio Uaupés, which is inhabited solely by tribes of Indians in their natural state, not at all altered and deteriorated by contact with the unprincipled white residents on the banks of the neighbouring rivers. Mr. Wallace collected quite a museum of the productions of the Indian tribes, but, most unfortunately, lost them all, together with the specimens of natural history obtained during the latter two years of his stay in that country, his journals for that period and numerous sketches, by the burning of the ship on his homeward voyage. The results which we have before us cause us the more to lament this misfortune. We hope that when he fulfils the desire expressed in his preface, of "again visiting the wild and luxuriant scenery and the sparkling life of the tropics," he may be again successful, but escape the concluding misfortune of his former journey. The author proposed to pay the expenses of his journey by making collections in natural history, and was enabled to do so, notwithstanding the deplorable loss which we have mentioned.

At the conclusion of the narrative there are four chapters on the natural history of the country and on the Indian tribes, which, had he saved all his materials, were intended to form part of a separate work on the Physical History of the Amazon. They well deserve careful perusal, and lead us to hope that, should Mr. Wallace fulfil his desire of revisiting the country, we may at a future time have such a work from his pen.

At the end of the volume are some valuable remarks by Dr. R. G. Latham on the vocabularies of Amazonian languages collected in the course of this journey.

#### *Preparing for Publication.*

#### *The Aquarium: a Biography of Marine Animals. With coloured Plates.*

Mr. P. H. Gosse is preparing for the press a work under the above title, which will contain many interesting particulars of the instincts and manners of various marine animals (hitherto little known) as observed in captivity. These will be preceded by a brief sketch of the history of the Marine Aquarium, and instructions for its use.

### PROCEEDINGS OF LEARNED SOCIETIES.

#### ZOOLOGICAL SOCIETY.

July 22, 1851.—John Edward Gray, Esq., F.R.S. &c., Vice-President, in the Chair.

#### DESCRIPTION OF A NEW FORM OF LAMPREY FROM AUSTRALIA, WITH A SYNOPSIS OF THE FAMILY.

By J. E. GRAY, Esq., F.R.S., V.P.Z.S. etc.

The Lamprey which I have now to present to the attention of the Society differs in so remarkable a degree from any other known species, that, premising that I propose for it the name of *Geotria Australis*,

lis, I think it best to connect with the description a revision of the whole Family to which it belongs.

### PETROMYZONIDÆ.

Nasal aperture closed, and the palate entirely covered with skin.

*Lampredia*, Rafin. Anal. Nat. 94, 1818.—*Petromyzonidæ* (*Petromyzonini*), Bonap. Syst. Ichth. 1838; De Kay, Nat. Hist. of New York, 379.—(Fam.) *Hyperoartia*, Müll. Abhandl. Akad. Berlin, 1836, 77; Mag. Zool. & Bot. i. 406.—*Petromyzidæ*, Gray, Syn. B.M. 1842, 148, 150.

Müller (*Abhandl. Akad. Berlin*) divided the genera thus:—

1. *Petromyzon*, with visible teeth.
2. *Ammocetes*, without visible teeth.

#### *Synopsis of Genera.*

##### A. Petromyzonina. *Teeth distinct; eyes visible.*

1. PETROMYZON. Upper inner teeth two, conical, close together; lower single, crescent-shaped; labial teeth numerous, conical; lingual teeth two, pinnate.

2. LAMPETRA. Upper and lower teeth transverse, crescent-shaped; labial teeth in two submarginal rows; inner lateral teeth larger, two- or three-lobed, lingual teeth pectinate.

3. GEOTRIA. Upper and lower teeth transverse, crescent-shaped; upper lobed; labial teeth numerous, distant, acute, innermost largest; lingual teeth elongate, conical, arched.

4. VELASIA. Upper and lower teeth transverse, crescent-shaped; upper two-lobed; labial teeth numerous, crowded, truncate; innermost largest; lingual teeth elongate, arched.

5. CARAGOLA. Upper internal teeth two, far apart, three-lobed; lower crescent-shaped, nine-lobed; labial teeth transverse, band-like, four tubercles; lingual teeth flattened.

6. MORDACIA. Upper inner teeth two; lateral three-lobed; lower nine, conical, in an arched series; labial teeth conical, in a single submarginal series; lingual teeth elongate, conical, arched.

##### B. Ammocetina. *Teeth none; eyes hidden.*

##### 7. AMMOCETES.

##### A. Petromyzonina. *Teeth distinct.*

##### 1. PETROMYZON.

Upper inner teeth two, triangular, close together. Lower inner tooth single, large, crescent-shaped, many-toothed. Labial teeth conical, acute, numerous, in diverging, arched series; the inner one largest, and gradually becoming smaller near the edge. Tongue with two compressed, pectinated teeth above, and a broad, lunate, dentated

tooth beneath, which is strongly bent up between the upper teeth in the centre.

Yarr. Brit. Fish. fig. p. 603; De Kay, Zool. New York, t. 56, 216 (bad).—*Petromyzon, sp.*, Linn. Syst. Nat.; Rafin. Anal. Nat.; Müll. Abhandl. Akad. Berlin, 1834, 77 (1836).—*Petromyzon*, Gray, Proc. Zool. Soc. 1851.

### 1. PETROMYZON MARINUS. The LAMPREY.

*Petromyzon marinus*, Linn. Bloch, iii. pl. 77; Linn. (édit. de Gmelin) Faun. Suec. 292; Artedi, Ichth. gen. 64. syn. 90; Neue Schrift. der Berl. Naturf. 7. 466; Schneid. Bloch, i. 530, 1801; Penn. Brit. Zool. iii. 102. pl. 10, 1776–78; Shaw, Gen. Zool. v. 251. pt. 2. pl. 133, 1804; Don. Brit. Fish. pl. 81, 1820–21; Flem. Brit. An. 163. sp. 1, 1827; Cuv. Règ. An. ii. 404, 1829; Müll. Mém. de l'Acad. Berlin, 1834, 78. t. 4. f. 1, 5; Osteol. t. 9, 65, 67, 68. f. 9; Yarr. Brit. Fish. 2 ed. ii. 598, 1841.—*Lamproie marbrée*, Daub. Encycl. Méth.; Bonn. Planches d'Hist. Nat. de l'Enc. Méth.—*Petromyzon maculosus*, Artedi, Ichth. gen. 64. syn. 90.—*Petromyzon lamproie*, Bloch, Hist. Nat. Poiss. 31, 77. pt. 13.—*Petromyzon maximus*, Cuv. Règ. An. ii. 118, 1817.—*Petromyzon*, Klein, Misc. Pisc. iii. f. 30. n. 3.—*Mustela sive Lampetra*, Belon, Aquat. 76; Salv. Aquat. f. 62 b.—*Lampetra major*, Schwenck. Theriotr. Siles. f. 451; Charlet, Onom. f. 153. n. 3; Aldrov. 539. liv. 4. c. 13; Jonston, liv. 2. tit. 2. c. 3. pl. 24. f. 5.—*Lamproie*, Coms. Hist. Nat. v. 284; Fermin, Surin. 85; Rond. 310. pt. 1. liv. 13; Valmont de Bomare, Dict. Hist. Nat.—*Lampetra Rondeletii*, *Lamprey or Lamprey-Eel*, Will, Ichth. 105. pl. 2. f. 2, 1685; Ray, Syn. f. 35. n. 3.—*Ioatzma unagi*, Kämpfer, Voy. au Japan, i. pl. 12. f. 2.—*Il mustilla*, Forsk. Desc. Anim. f. 18.—*Plota fluta*, Authors.—*Lampetra*, *Lampreda kentmanni*, *lampreda*, *marina*, *mustela*, Gesn. (germ.) 180 b. et paralip. 22.—*Le Pétromyzon Lamproie*, Lacépède, Hist. Nat. Poiss. i. 2, 3. pl. 1, 1798.—*La Grande Lamproye*, Cuv. Règ. An. ii. 404, 1819.

*Hab.* European Seas.

### 2. PETROMYZON JURÆ. MACCULLOCH'S LAMPREY.

*Petromyzon Juræ*, MacCull. West. Isles, ii. 186, 187. t. 29. f. 1; Jen. B. V. A. 522.—*Petromyzon fluviatilis*, var., Flem. Brit. An. 162.

*Hab.* Coast of Scotland, east shore; island of Jura.

Probably a variety of *P. marinus*: the drawing of the teeth shows it has no relation to *P. fluviatilis*.

### 3. ?PETROMYZON AMERICANUS. AMERICAN SEA LAMPREY.

*Petromyzon marinus*, Schæppf. Beobachtungen, &c. viii. 184; Mitch. Trans. Lit. & Phil. Soc. i. 461.—*Petromyzon americanus*, Lesueur, Amer. Phil. Soc. (N. S.) i. 382; Hist. N. A. Fish. ined. plate; Storer, Rep. on the Fishes of Massachusetts; De Kay, Nat. Hist. of New York, 379. pl. 66. f. 216. pt. 1; Zool. 1842.

*Hab.* N. America.

### 4. PETROMYZON NIGRICANS. BLUISH SEA LAMPREY.

*Petromyzon nigricans*, Lesueur, Amer. Phil. Soc. (N. S.) i. 385;

Storer, Rep. on the Fishes of Massachusetts; De Kay, Nat. Hist. of New York, 381, pl. 79, f. 247 (teeth indistinct), pt. 1; Zool. 1842.

*Hab.* N. America.

### 5. PETROMYZON ARGENTEUS. SILVERY LAMPREY.

*Petromyzon argenteus*, Kirtland, Boston Journ. iii. 342. pl. 4. f. 3; De Kay, Nat. Hist. of New York, 382. pt. 1; Zool. 1842.

*Hab.* N. America, river Ohio.

### 2. LAMPETRA.

Upper inner tooth single, transverse, lunate, entire, with a conical prominence at each end. Lower inner tooth single, transverse, lunate, many-toothed, outer lobe largest. Labial teeth unequal, the outer numerous, small, subequal, conical, in a single, submarginal series, the inner larger, unequal; of the upper part small, in series; of the sides in a single series, larger, with two or three conical tubercles. Tongue with two compressed, pectinated teeth above, and a large, crescent-shaped, transverse tooth below, crenated on the edge, and with a larger, conical projection in the centre.

Yarr. Brit. Fish. fig. p. 604; De Kay, Nat. Hist. of New York, t. 79, 249 (bad).—*Petromyzon*, sp., Linn., Cuv., Müll.—*Lampetra*, sp., Ray.—*Lampetra*, Gray, Proc. Zool. Soc. 1851.

\* *Dorsal fins separate.*

### 1. LAMPETRA FLUVIATILIS. LAMPERN OR RIVER LAMPREY.

*Petromyzon fluvialis*, Linn. Bloch, pt. 3. pl. 78. f. 1; Linn. (edit. de Gmel.); Müll. Prod. 37. n. 307; Aldrov. 587; Penn. Brit. Zool. v. pt. 106. pl. 10, 1776–78; Schneid. Bloch, 530, 2, 1801; Shaw, Gen. Zool. 257. pt. 2, 1804; Don. Brit. Fish. pl. 80, 1820–28; Flem. Brit. An. 404, 1827; Cuv. Règ. An. ii. 404, 1829; Mém. de l'Acad. Berlin, 78, 1834; Jen. Man. Brit. Vert. 521. sp. 210, 1835; Yarr. Brit. Fish. 2 ed. ii. 598, 1841; Parnell; Rich. Faun. Bor. 294, 1836. —*Petromyzon fluvialis*, Cuv. Règ. An. ii. 118, 1817.—*Lamproie prycka*, Daub. Encycl. Méth.—*Nein-oga natting*, Faun. Suec. 106. —*Petromyzon*, &c., Artedi, gen. 64. syn. 89. sp. 99.—*La petite Lamproie*, Bloch, 34. pt. 3. pl. 78. f. 1.—*La Lamproie branchiale*, Bonn. Planches de l'Encycl. Méth.—*Petromyzon Prick (negen-oog)*, Gro-nov. Mus. i. 64. n. 114; Zooph. 38.—*Mustela*, Pliny, liv. 9. c. 17. —*Mustela fluvialis*, Belon, Aquat. 75.—*Lampetra subcinerea, maculic carens*, Salv. Aquat. 62.—*Lampetra, alterum genus*, Gesn. Aquat. 597.—*Lampreda*, Icon. Anim. 326.—*Lampetra, medium genus*, Will. Ichth. 106. tab. g. 2, 3. f. 1, 2; Ray, Syn. Pisc. 25. n. 1. —*Lampetra fluvialis*, Aldrov. 587; Jonston, 104. pl. 28. f. 11; Schone, 41; Charlet, 159. n. 7; Marseli, Dan. Pann. iv. 2. t. 1, 1726. —*Lampetra fluvialis, media*, Schwenck. Theriotr. Siles. 532.—*Jaatz me unagi*, Kämpfer, Voy. dans le Japan, i. 156. pl. 12. f. 2.—*Minog*, Rzæzynski, 134.—*Lamproie*, Fermin, Hist. Nat. de Surinam, 85.—*Petromyzon*, Kramer, Elenchus, 38. n. 1; Klein, Misc. Pisc. iii. 29. n. 1. t. 1. f. 3.—*Le Petromyzon pricka*, Lacépède, Hist. Nat. des Poiss. i. 18, 1798.

*Hab.* Europe.

**2. LAMPETRA PLANERI. FRINGED-LIPPED LAMPERN.**

*Petromyzon planeri*, Linn. Bloch, viii. pl. 78. f. 3; Linn. (édit. de Gmelin); Schneid. Bloch, 531, 532, 4, 1801; Shaw, Gen. Zool. v. pt. 2. p. 259, 1804; Jen. Man. Brit. Vert. 522. sp. 211, 1835; Müll. Mém. de l'Acad. Berlin, 78, 1834; Cuv. Règ. An. ii. 404, 1829; Yarr. Brit. Fish. 2 ed. ii. 607, 1841.—*Lamproiea planer*, Bonn. Planches de l'Encycl. Méth.—*Le Pétromyzon planer*, Lacépède, Hist. Nat. des Poiss. i. 30. pl. 3, 1798.

*Hab.* Europe.

\*\* Dorsal fin in contact with the second.

**3. LAMPETRA SANGUISUGA. LEECH LAMPERN.**

*Petromyzon Sanguisuga*, Lacépède, Hist. Nat. des Poiss. ii. 99. pl. 1; Supp. to Petromyzon; Shaw, Gen. Zool. v. pt. 2. p. 261, 1804.—*Petromyzon planeri*, var., Cuv. Règ. An. ii. 118.

*Hab.* Europe, Seine.

A very doubtful species; Cuvier says it is the same as the former.

**4. LAMPETRA LAMOTTENII. AMERICAN LAMPERN.**

*Petromyzon Lamottenii*, Lesueur, Hist. N. A.; De Kay, Nat. Hist. of New York, 382. pl. 79. f. 249 (mouth), pt. 1; Zool. 1842.

*Hab.* N. America, New York.

**3. GEOTRIA, n. g.**

Upper internal tooth large, transverse, crescent-like, divided into four lobes; the two inner lobes small, acute; outer truncated. The lower internal tooth transverse, narrow, slightly sinuous. The labial teeth numerous, far apart, conical, acute, in arched series, diverging from the throat; the innermost one larger, rest small; the innermost one of the lower part on each side small, elongate, transverse, with two small, rudimentary tubercles. Tongue with two elongate, conical, arched teeth, with a triangular plate on the lower side of the base. Throat with a very large dilatable pouch. Dorsal fins two, far apart. Mouth very large, surrounded with rather large, transverse, torn leaves.

This genus chiefly differs from *Velasia* in the rudimentary state of the lower internal tooth, in the form of the labial teeth, in the large size of the oral disk, and the extraordinary development of the throat-pouch, which is found in a rudimentary state in the *Petromyzon marinus*. This development of the pouch is perhaps to adapt the animal to the long drought of the Australian rivers.

**1. GEOTRIA AUSTRALIS. POUCHED LAMPREY.**

*Hab.* South Australia. Fresh water.

**4. VELASIA.**

Upper internal teeth large, transverse, crescent-like, divided into four flat, elongated lobes; the outer lobes largest. The lower internal teeth large, transverse, crescent-like, convex, denticulated on the edge. The labial teeth very numerous, truncated, in crowded, arched

series, diverging from the throat ; the inner ones large, and gradually diminishing in size to the edge. Tongue with two very large, long, curved teeth, with a triangular plate beneath at their base. Dorsal fins two, far apart. Mouth moderate, edged with transverse foliations.

### 1. VELASIA CHILENSIS. CHILIAN LAMPERN.

*Hab.* Chili. In fresh water.

### 5. CARAGOLA.

Upper inner teeth two, large, separate, lateral, submarginal, each with three acute tubercles. Lower inner teeth large, crescent-shaped, nine-lobed ; the central and two lateral lobes on each side larger. The labial teeth in a subcircular, submarginal series, large, transverse, band-like, with three or four tubercles. Tongue with two flattened teeth, and a triangular, transverse plate below, with an acute process between the teeth on the upper edge. Dorsal fins two, far apart.

### 1. CARAGOLA LAPICIDA. CARAGOL.

*Hab.* West Coast of America.

### 6. MORDACIA.

Upper inner teeth two, separate, lateral, subtrigonal, each with three tubercles. The lower nine conical, acute, in an arched series ; the five central smaller. Labial teeth small, conical, in a single, circular, submarginal series, with a single, additional, odd tooth in the centre above. Tongue with two conical, arched teeth. (Rich. Voy. Erebus & Terror, t. 38.)

*Petromyzon, sp.*, Rich. Voy. Erebus & Terror, t. 38, 1845.

### 1. MORDACIA MORDAX. AUSTRALIAN LAMPERN.

*Petromyzon mordax*, Rich. Voy. Erebus & Terror, t. 38, 1845.—  
*Mordacia mordax*, Gray, Proc. Zool. Soc. 1851.

*Hab.* Tasmania.

### Species of Doubtful Situation in the Family.

#### 1. PETROMYZON APPENDIX. SMALL LAMPREY.

*Petromyzon appendix*, De Kay, Nat. Hist. of New York, 381. pl. 64. f. 211. pt. 1 ; Zool. 1842.

*Hab.* N. America, Hudson River.

"A ring of irregular-shaped corneous processes within the oral orifice, and a large isolated double tooth of the same texture on the inferior portion of the mouth."—*De Kay*.

#### 2. PETROMYZON TRIDENTATUS. TRIDENTATE LAMPREY.

*Petromyzon tridentatus*, Gairdener, Rich. Faun. Bor. Amer. 293, 1836 ; De Kay, Nat. Hist. of New York, 381. pt. 1 ; Zool. 1842.

*Hab.* N. America, Falls of the Walamet.

## 3. PETROMYZON ARGENTEUS. SILVERY LAMPREY.

*Petromyzon argenteus*, Bloch, t. 415. f. 2; Schneid. Bloch, 532. t. 102. f. 1, 1801; Shaw, Gen. Zool. v. pt. 2. p. 262, 1841.  
*Hab.* Indian Seas.

## 4. PETROMYZON BICOLOR. BRILLIANT LAMPREY.

*Petromyzon bicolor*, Shaw, Gen. Zool. v. pt. 2. p. 263, 1804.—  
*Petromyzon niger*, Lacépède, iv. 667.  
*Hab.* Europe, Seine.

## 5. PETROMYZON PLUMBEUS. LEADEN LAMPREY.

*Petromyzon plumbeus*, Shaw, Gen. Zool. v. pt. 2. p. 263, 1804.—  
*Petromyzon Septœil*, Lacépède, iv. 667.  
*Hab.* Europe, Seine.

## B. Ammocœtina. Teeth none; eyes none.

## 7. AMMOCŒTES.

Teeth none.

*Ammocœtes*, Dum. Zool. Anal.; Cuv. Règ. An. ii. 118, 1817; Müll. Abhandl. Akad. Berlin, 1834, 78 (1836).—?*Lampreda*, Rafin. Anal. Nat. 94, 1815.

## 1. AMMOCŒTES BRANCHIALIS. PRIDE OR SANDPIPER.

*Ammocœtes branchialis*, Dum.; Flem. Brit. An. 164. sp. 3, 1828; Cuv. Règ. An. 406, 1829; Müll. Mém. de l'Acad. Berlin, 1834; Jen. Man. Brit. Vert. 522. sp. 212, 1835; Yarr. Brit. Fish. 2 ed. ii. 609, 1841.—*Petromyzon branchialis*, Linn. (édit. de Gmelin) 1815; Bloch, pt. 3. pl. 78? f. 2; Linn. Faun. Suec. 292; Wulff. Ichth. Borus. 15. n. 20; Müll. Prod. Zool. Dan. 37. n. 307 b; Kramer, Elench. 483; Penn. Brit. Zool. iii. 107. pl. 10, 1776–78; Shaw, Gen. Zool. 260, 1804.—*Petromyzon corpore annuloso*, &c., Artedi, gen. 42. syn. 90.—*Lamproie branchiale*, Bonn. Planches de l'Encycl.; Daub. Encycl. Méth.—*Petromyzon*, Gronov. Zooph. 38. n. 160; Klein, Misc. Pisc. iii. 30. n. 4.—*Petromyzon cæcus*, Couch, Mag. Nat. Hist. v. 23. f. 60.—*Mustela fluviatilis*, Gesner, Aquat. 589; Icon. Anim. 286; Thierb. 159 b.—*Lampetra minima*, Aldrov. 539.—*Lampern, or Pride of the Isis*, Will. Ichth. 104.—*Pride*, Plot, Hist. of Oxford, 182. t. 10.—*Lampetra cæca*, Will. Ichth. tab. g. 3. f. 1; Ray, Syn. Pisc. 35. n. 2, 4; Couch, Loudon's Mag. Nat. Hist. v. 23. f. 9, 10.—*Lampretta neunange*, Jonston, t. 28. f. 10.—*Lampryon et Lamprillon*, Rond. Hist. Poiss. ii. 202.—*Querder*, Schlamerquerder, Schwenckf. Theriotr. Siles. 423.—*Der Kieferwurn*, Müll. I. c. iii. 234.—*Lampreyon*, Valmont de Bomare, Dict. Hist. Nat.—*Le Petromyzon lampreyon*, Lacépède, Hist. Nat. des Poiss. i. 26. pl. 2. f. 1, 1798.

*Hab.* Europe, rivers.

## 2. AMMOCŒTES RUBER. RED LAMPREY.

*Ammocœtes ruber*, Cuv. Règ. An. 406, 1829; Müll. Mém. de l'Acad. Berl. 78, 1834.—*Petromyzon ruber*, Lacépède, Hist. Nat.

des Poiss. ii. 99. pl. 1; Supp. to *Petromyzon*; Shaw, Gen. Zool. v. pt. 2. p. 261, 1804.—*Ammocetes branchialis*, var., Cuv. Règ. An. ii. 118, 1817.

*Hab.* Europe, Seine.

3. **AMMOCÈTES CONCOLOR.** MUD EEL or BLIND EEL.

*Ammocetes concolor*, Kirtland, Boston Journ. iii. 473. pl. 27. f. 1 a, b, 1841.

*Hab.* N. America, Mahoning and Scioto rivers.

4. **AMMOCÈTES BICOLOR.** COLOURED MUD LAMPREY.

*Ammocetes bicolor*, Lesueur, Amer. Phil. Soc. (N. S.) i. 386.—*Ammocetes bicolor*, Storer, Fishes of Massachusetts, 198; De Kay, Nat. Hist. of New York, 383, 679. f. 248. pt. 1; Zool. 1842.

*Hab.* N. America, Connecticut river.

5. **AMMOCÈTES UNICOLOR.** PLAIN MUD LAMPREY.

*Ammocetes unicolor*, De Kay, Nat. Hist. of New York, 383. pl. 79. f. 250. pt. 1; Zool. 1842.

*Hab.* N. America, Lake Champlain.

Nov. 11, 1851.—W. J. Broderip, Esq., Vice-President, in the Chair.

The following paper was read:—

DESCRIPTIONS OF SIXTEEN NEW SPECIES OF RISSOINA.

BY ARTHUR ADAMS, SURGEON R.N., F.L.S. ETC.

RISSOINA, D'Orbigny.

About eighteen species of this genus, as restricted by M. d'Orbigny, have been already described, inhabiting various countries. Those here named are a portion of the discoveries made by Mr. Cumming among the islands of the Philippine Archipelago, and are many of them of considerable size; and it is in these that the peculiarity of operculum is best seen.

The process of the semiovate, horny, subspiral operculum, first pointed out by D'Orbigny, is sometimes very long and slender, and very much resembles in appearance the analogous appendage of the operculum of *Nerita* and *Neritina*. The genus *Jeffreysia* of Alder, or *Rissoella* of Gray, has a similar appendage, but the position of the eyes, and the peculiar structure of the fore part of the head, place the latter genus in a different family, viz. *Pyramidellidae*. The *Rissoinæ* may also readily be known from the neighbouring genus *Rissoa*, by the aperture being somewhat channeled anteriorly, whereas in *Rissoa* it is continuous and entire. The nature of the animal resembles *Rissoa*, according to D'Orbigny, who places the genus among the *Melaniadæ*.

1. **RISSOINA PLICATA**, A. Adams. *R. testū turrito-subulatā, subpyramidalī, albd, sordidī, anfractib⁹ octo, planis, longitudinaliter valdē plicatā, transversim striatā, plicis elevatis, posticē subangulatis, interstitiis transversim striatis; aperturā Ann. & Mag. N. Hist. Ser. 2. Vol. xiii.*

*semiovata, anticè subcanaliculata; labro anticè subdilatato, margine incrassato.*

*Hab.* Isle of Masbate. Mus. Cuming.

2. **RISSOINA FASCIATA**, A. Adams. *R. testa subulato-turrita, solidā, sordidè albā, rufo-fusco fasciatā, anfractibus octo, convexiusculis, transversim tenuissimè (sub lente) striatā, longitudinaliter plicatā, plicis obliquis, æqualibus, subdistantibus; aperturā semiovata, anticè subcanaliculata; labro subdilatato.*

*Hab.* Sydney, under stones, low water (Mr. Strange). Mus. Cuming.

3. **RISSOINA SCALARIANA**, A. Adams. *R. testa subulato-turrita, albā, solidā, anfractibus octo, convexiusculis, transversim tenuissimè striatā, longitudinaliter costatā, costis elevatis, æqualibus, subdistantibus, anfractu ultimo anticè callo circumdato; aperturā semiovali, anticè subcanaliculata; labio anticè callo desinente; labro flexuoso, anticè subproducto.*

*Hab.* Isle of Burias, Philippines. Mus. Cuming.

4. **RISSOINA PYRAMIDALIS**, A. Adams. *R. testa turrito-pyramidalis, sordidè albā, solidā, anfractibus octo, planiusculis, transversim tenuiter striatā, longitudinaliter plicatā, plicis obliquis, confertis, subelevatis, interstitiis transversim striatis; aperturā semiovata, anticè subcanaliculata; labio anticè callo desinente; labro subdilatato, incrassato.*

*Hab.* Isle of Baclayon. Mus. Cuming.

5. **RISSOINA D'ORBIGNYI**, A. Adams. *R. testa subulato-turrita, albida, subpellucida; anfractibus decem, convexiusculis, supremis costellatis, lineolis elevatis, transversis, et longitudinalibus, decussatā; aperturā semiovata, anticè subcanaliculata; labio anticè subcalloso; labro dilatato, subreflexo, margine flexuoso, subacuto.*

*Hab.* Isle of Luzon. Mus. Cuming.

6. **RISSOINA CLATHRATA**, A. Adams. *R. testa subulato-turrita, albā, solidā, anfractibus convexiusculis, lineis elevatis, longitudinalibus et transversis decussatis, valde clathrata, anfractu ultimo anticè sulco transverso instructo; aperturā semiovata, anticè subcanaliculata; labro flexuoso, anticè producto, margine extus varicoso.*

*Hab.* Isle of Bohol. Mus. Cuming.

7. **RISSOINA MICANS**, A. Adams. *R. testa turrito-subulata, albā, solidā, nitida, anfractibus convexis, novem, longitudinaliter plicatā, plicis elevatis, subdistantibus, æqualibus, interstitiis transversim striatis, anfractu ultimo anticè valde sulcata; aperturā semiovata, anticè subcanaliculata; labro flexuoso, anticè subproducto, extus varicoso.*

*Hab.* Island of Mindanao. Mus. Cuming.

8. **RISSOINA NIVEA**, A. Adams. *R. testa parva, subulato-turrita, subpellucida, nivida, subnitida, anfractibus convexiusculis,*

*longitudinaliter plicata, plicis obliquis, anticè subobsoletis; apertura semiovata, anticè subcanaliculata; labro subdilatato, extus incrassato.*

*Hab.* Port Lincoln, Australia. Mus. Cuming.

9. **RISSOINA MONILIS**, A. Adams. *R. testa turrito-subulata, solidā, fulvā, anfractibus septem, planis, granulis moniliformibus ad suturas, longitudinaliter plicata, plicis confertis, angustis, aequalibus, interstitiis punctato-clathratis; apertura semiovata, anticè subcanaliculata; labio subincrassato; labro extus valde varicoso, margine transversim striato.*

*Hab.* Philippine islands. Mus. Cuming.

10. **RISSOINA BELLULA**, A. Adams. *R. testa subulato-turrita, albā, semipellucidā; anfractibus octo, convexiusculis, cingillis transversis, elevatis, granulosis, interstitiis longitudinaliter concinnè clathratis, ornata; anfractu ultimo sulco profundo instructo; apertura semiovata, anticè subcanaliculata; labio anticè callo terminato; labro flexuoso, margine extus valde varicoso.*

*Hab.* Isle of Calapan. Mus. Cuming.

11. **RISSOINA STRIOLATA**, A. Adams. *R. testa subulato-turrita, albā, tenui, pellucidā; anfractibus undecim, supremis longitudinaliter plicatis, planulatis, prope suturas subangulatis; transversim striata, striolis confertis concentricis; apertura semiovata, anticè subcanaliculata; labio posticè incrassato, anticè callo desinente; labro dilatato, margine incrassato, subreflexo.*

*Hab.* Baclayon island, Philippines. Mus. Cuming.

12. **RISSOINA COSTATA**, A. Adams. *R. testa subulato-turrita, albā, opaca, solidā, anfractibus septem, convexiusculis, longitudinaliter costata, costis crassis, elevatis, posticè subangulatis, anfractu ultimo anticè sulco transverso valido instructo; apertura semiovata, anticè subcanaliculata; labio anticè tuberculo terminato; labro subdilatato, margine varicoso, flexuoso.*

*Hab.* Cobiga, Peru. Mus. Cuming.

13. **RISSOINA NITIDA**, A. Adams. *R. testa turrito-subulata, albā, solidā, nitida, anfractibus novem, convexiusculis, longitudinaliter costata, transversim lirata, liris ad costas nodulosis; apertura semiovata, anticè subcanaliculata; labio anticè callo desinente; labro extus incrassato, margine subacuto, anticè diaphano producto.*

*Hab.* Isle of Camaguing. Mus. Cuming.

14. **RISSOINA CONCINNA**, A. Adams. *R. testa subulato-turrita, albā, solidā, nitida, anfractibus septem, planiusculis, longitudinaliter plicata, plicis anticè evanidis, transversim striata, striis creberrimis, confertis; apertura semiovata, anticè subcanaliculata; labio calloso; labro margine valde incrassato et rotundato.*

*Hab.* Cagayan, Philippines. Mus. Cuming.

15. **RISSOINA NODICINCTA**, A. Adams. *R. testā subulato-turritā, albā, solidā, anfractibus 10-12, convexis, longitudinaliter plicatā, plicis angustis, distantibus, transversim tenuissimè striatā, in medio anfractuum cingulā elevatā ad plicas nodosā, ornatā, suturā nodulis moniliformibus cinctā; aperturā semiovatā, anticē subcanaliculatā; labio anticē callo terminato; labro dilatato, extus incrassato, margine flexuoso.*

*Hab.* Isle of Capul, Philippines. Mus. Cuming.

16. **RISSOINA CÆLATA**, A. Adams. *R. testā subulato-turritā, albida, solidā; anfractibus octo, convexiusculis, supremis clathratis, ultimo cingulis elevatis, æqualibus, subdistantibus, transversis, interstitiis lineis elevatis, longitudinalibus et transversis, decussatim ornata; aperturā semiellipticā, anticē subcanaliculatā; labio calloso; labro anticē dilatato, margine incrassato, subreflexo.*

*Hab.* Siquijor. Mus. Cuming.

The two following species are true *Rissoœ*, characterized by the simple aperture, which is not channeled in front, and by the absence of the calcareous appendage to the operculum. Many species of small shells have been inaccurately referred to *Rissoa*, some of which belong, however, to entirely different families.

**RISSOA BELLA**, A. Adams. *R. testā turrito-subulatā, albā, solidā; anfractibus quinque, planiusculis; spirā apice obtuso, lineis transversis, elevatis, concentricis, confertis, ornatā; aperturā ovali, anticē integrā; labio subcalloso; labro subdilatato, extus marginato, margine flexuoso.*

*Hab.* Philippine islands. Mus. Cuming.

**RISSOA ELEGANS**, A. Adams. *R. testā subulato-turritā, albā, semipellucidā; anfractibus 7, convexiusculis; suturā canaliculatā, lineis elevatis transversis concentricis et longitudinalibus concinnè decussatā; aperturā ovali, subproductā, anticē integrā; labio calloso; labro anticē dilatato, extus varicoso, margine acuto, subreflexo.*

*Hab.* Philippines. Mus. Cuming.

#### BOTANICAL SOCIETY OF EDINBURGH.

The Society opened their Eighteenth Session on Thursday, November 10th,—

Professor Balfour, President, in the Chair.

Dr. Balfour, in taking the Chair, alluded to the value of the Society as a means of keeping up a friendly intercourse among those who were prosecuting the science of botany. He noticed the recent researches in regard to the class of plants called Diatomaceæ, and stated that a large microscopical collection had been made at the Botanic Garden, and that the specimens would be exhibited during the Session.